

NWS Form E-5
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(PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)
San Juan, Puerto Rico

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
MONTH YEAR
December 2010

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE
Althea Austin-Smith,
Service Hydrologist
DATE
01/14/2011

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

☐ An X inside this box indicates that no flooding occurred within this hydrologic service area.

Summary: The San Juan ASOS reported 7.47 inches of rain for the month of December; 2.90 inches greater than the normal of 4.57 inches. The ASOS rainfall report from Cyril E. King Airport in St. Thomas was 1.58 inches for the month of December; 1.16 inches less than the normal of 2.18 inches.

"...a cold front brought persistent periods of light to moderate rainfall across much of northern Puerto Rico beginning the evening of December 14th, and continuing throughout the day of December 15th. Due to the persistent rainfall and thick cloud cover, the temperature peaked at only 76 degrees F on Wednesday 15th. This marked the coolest day in the San Juan Metro Area for December 15th since 1898, and the coolest day in San Juan since March 7th, 2010, when the temperature reached only 74 degrees F at the airport. ...Across the U.S. Virgin Islands, December 2010 was below normal in terms of both precipitation and temperature. At the Christiansted Airport on St Croix, the monthly precipitation total of 0.37" was 2.92" below normal. In terms of temperature, the average temperature was 4.0 and 3.0 degrees below normal for St Thomas and St Croix respectively." (Excerpts from SJU's climate reports ... for more local climate details ... see <http://www.srh.noaa.gov/sju/?n=dec2010cr>)

In December, the region had a break from the record breaking rainfall months that created a [historic rainfall year](#) which naturally resulted in a very busy year hydrologically. While December was relatively "quiet" (even with San Juan's high totals); unfortunately during 2010 we did tally a few deaths and lots of destruction from flash flooding, both in Puerto Rico and the Virgin Islands.

This month was more routine with the bulk of the hydrologic activity limited to small stream and urban flooding except for some flooding along the basins along the north coast of Puerto Rico and even in these cases, the impact was non-catastrophic.

**LSRs due to inland
Flooding for the month of December**

1250 AM FLOOD VEGA ALTA 18.42N 66.32W
 12/08/2010 VEGA ALTA PR EMERGENCY MNGR

FLOODING IN CERRO GORDO AT THE END OF ROUTE 690. PEOPLE
 TRAPPED IN THEIR HOMES.

The approximate amounts of Hydrologic Products issued during the month of December are as follows:

Table 1 - Hydrologic Products Issued

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	4
Flood Warnings (SJUFLWSJU)	12
Flash Flood Warnings (SJUFFWSJU)	5
Flash Flood Statements (SJUFFSSJU)	5
Urban/Small Stream Flood Advisories (SJUFLSSJU)	78

For monthly "radar totals" use the archive of the Advanced Hydrologic Prediction Service (AHPS) - click on Puerto Rico and request the duration you would like to view...daily or monthly remembering that the 24 hour totals are from 12z – 12z (8am to 8am in PR) - [AHPS archive of radar totals/ images](#) . Here are the [December 2010 totals](#).